

pollution is published as causing 3x more deaths than malaria. could halogenated metformin prevent cancer and heart disease from pollution at less than .5c per day? What about a 5 year depot injection  
how about an immunometformin immunization?

metformin xr exists; plasma half life of metformin is near 6 hours

how about a pill of food that increases ciliary motion at the lungs as a way of reducing death from particulate pollution; many OTC mucous thinners exist; also what are the genetics of ciliary motion

\$1 catalytic converter with laser pointer activation removes nox  
wikipedia

[https://en.wikipedia.org/wiki/Air\\_polluti](https://en.wikipedia.org/wiki/Air_polluti)

on says “nitrogen dioxide is responsible for 23,500 premature UK deaths per annum” and that catalytic converters remove NOx

air pollution causes “acute vascular dysfunction” also “The mechanisms linking air pollution to increased cardiovascular mortality are uncertain, but probably include pulmonary and systemic inflammation” “A 2007 review of evidence found ambient air pollution exposure is a risk factor correlating with increased total mortality from cardiovascular events (range: 12% to 14% per 10 microg/m<sup>3</sup> increase)” “effects may be mediated by vasoconstriction, low-grade inflammation and atherosclerosis”

“Studies have shown that in urban areas patients suffer mucus hypersecretion”

about pm 2.5 “total cardiovascular mortality (range: 12% to 14% per a 10 microg/m<sup>3</sup> increase)”

“PM2.5 was strongly associated with 18% of preterm births globally,”

“The proportion of low birth weight attributable to air pollution, was 13%. This is the largest attributable risk ever reported for the known risk factors of low birth weight”

wikipedia also says “One out of ten deaths in 2013 was caused by diseases associated with air pollution”

another wikipedia article says  
[https://en.wikipedia.org/wiki/List\\_of\\_pollution-related\\_diseases](https://en.wikipedia.org/wiki/List_of_pollution-related_diseases)

### **Outdoor air pollution**<sup>[edit]</sup>

- 40% – ischaemic heart disease
- 40% – stroke

- 11% – chronic obstructive pulmonary disease (COPD)
- 6% - lung cancer
- 3% – acute lower respiratory infections in children

## Indoor air pollution zapper

Recently I read that air pollution is associated with deaths and illness, particularly at the developing world.

Wikipedia says, “nitrogen dioxide is responsible for 23,500 premature UK deaths per annum” So globally that could be over a million.

A technology could put automotive style catalytic converters indoors very cheaply. A recycled catalytic converter is about \$125-200. So, noting that the volume of air is far smaller than the volume of a continuous stream of exhaust, perhaps 1/100th the amount of platinum catalyst could be used. So, for just \$1 or \$2 the core component of the air purifier could be constructed. It could be heated with a filament, or just perhaps a laser pointer making a high temperature spot and a fan would blow air past the catalyst. Places such as China frequently have indoor particulate filters now. This could be an added feature. A \$5 unit might be possible with mass production.

combo chemicals at FDA get approved

think of an inkjet printer, up to 4800 x 9600 dpi, now instead of ink have it print dissimilar metals (Ag, Zn?) and a solid electrolyte, with the intricate 9600 dpi resolution the paper will have sudden extreme voltage or sudden extreme current creating awesome lightning effects (voltage) or do impressive electrochemistry on the other printed inks; also possible to make novel electromagnet

Another version of this could work at central HVAC where a possibly regular sized catalytic converter could remove all the

NOx from whole-building air circulated at office towers.

They could have a sensor at the HVAC to find out how much NOx there was in the circulating air then energize appropriately.